

## **ABSTRACT**

The aim of the present invention is to provide a method to detect misbehavior use of the IEEE 802.11 standard without modifying the standard itself.

This aim is reached according to a method for detecting misbehavior in a contention based communication network, this method comprising the steps of:

- recording at least some of invalid frames with their respective station identification issued by the stations accessing an Access Point,
- recording at least some of valid frames with their respective station identification issued by the stations accessing the Access Point,
- determining, for each station, a scrambled ratio based on the number of invalid frames and the number of valid frames,
- detecting a misbehavior station based on a station which has a substantially lower ratio than the other stations.